

OM protein - protein search, using sw model

Run on: April 8, 2005, 20:46:20 ; Search time 43 Seconds
(without alignments)
289.916 Million cell updates/sec

Title: US-09-668-558B-32
Perfect score: 167
Sequence: 1 MHWGTLGFLWLWPYLFYVQ.....SRLQGS LQDMLWQLDLSPGC 167

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 513545 seqs, 74649064 residues

Word size : 0

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 1000 summaries

Database : Issued_Patents_AA:*
1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query		DB	ID	Description
		Match	Length			
1	167	100.0	167	2	US-08-540-242A-4	Sequence 4, Appli
2	167	100.0	167	2	US-08-347-563A-4	Sequence 4, Appli
3	167	100.0	167	2	US-09-003-081-5	Sequence 5, Appli
4	167	100.0	167	3	US-08-292-345B-4	Sequence 4, Appli
5	167	100.0	167	3	US-08-648-262-5	Sequence 5, Appli
6	167	100.0	167	3	US-08-648-263-5	Sequence 5, Appli
7	167	100.0	167	3	US-08-485-942A-4	Sequence 4, Appli
8	167	100.0	167	3	US-08-488-214A-4	Sequence 4, Appli
9	167	100.0	167	3	US-08-488-208A-4	Sequence 4, Appli
10	167	100.0	167	3	US-08-759-628-1	Sequence 1, Appli
11	167	100.0	167	3	US-08-688-908-7	Sequence 7, Appli

12	167	100.0	167	3	US-08-483-211A-4	Sequence 4, Appli
13	167	100.0	167	3	US-08-488-223A-4	Sequence 4, Appli
14	167	100.0	167	3	US-09-147-805-4	Sequence 4, Appli
15	167	100.0	167	4	US-08-438-431A-4	Sequence 4, Appli
16	167	100.0	167	4	US-08-488-225A-4	Sequence 4, Appli
17	167	100.0	167	4	US-09-204-730B-4	Sequence 4, Appli
18	167	100.0	167	4	US-09-316-393-4	Sequence 4, Appli
19	167	100.0	167	4	US-09-377-081-17	Sequence 17, Appl
20	167	100.0	167	4	US-09-686-647A-4	Sequence 4, Appli
21	167	100.0	167	5	PCT-US96-01471-4	Sequence 4, Appli
22	167	100.0	397	4	US-08-775-066-2	Sequence 2, Appli
23	146	87.4	146	1	US-08-398-021-3	Sequence 3, Appli
24	146	87.4	146	2	US-08-788-943A-5	Sequence 5, Appli
25	146	87.4	146	2	US-08-823-104-3	Sequence 3, Appli
26	146	87.4	146	2	US-09-003-081-6	Sequence 6, Appli
27	146	87.4	146	3	US-08-648-262-6	Sequence 6, Appli
28	146	87.4	146	3	US-08-648-263-6	Sequence 6, Appli
29	146	87.4	146	3	US-08-914-375C-32	Sequence 32, Appl
30	146	87.4	146	4	US-09-172-644-1	Sequence 1, Appli
31	146	87.4	146	4	US-09-221-178-1	Sequence 1, Appli
32	146	87.4	146	4	US-09-200-919-1	Sequence 1, Appli
33	146	87.4	146	5	PCT-US96-00952-2	Sequence 2, Appli
34	146	87.4	146	5	PCT-US96-00952-3	Sequence 3, Appli
35	146	87.4	147	4	US-09-200-919-4	Sequence 4, Appli
36	146	87.4	148	1	US-08-429-362-3	Sequence 3, Appli
37	146	87.4	148	2	US-08-823-104-18	Sequence 18, Appl
38	137	82.0	146	2	US-08-788-943A-8	Sequence 8, Appli
39	137	82.0	146	2	US-08-823-104-13	Sequence 13, Appl
40	137	82.0	146	3	US-08-674-774-8	Sequence 8, Appli
41	137	82.0	146	5	PCT-US96-00952-6	Sequence 6, Appli
42	124	74.3	146	2	US-08-788-943A-2	Sequence 2, Appli
43	124	74.3	146	2	US-08-823-104-11	Sequence 11, Appl
44	119	71.3	119	2	US-08-347-563A-25	Sequence 25, Appl
45	119	71.3	119	3	US-08-485-942A-25	Sequence 25, Appl
46	119	71.3	119	3	US-08-488-214A-25	Sequence 25, Appl
47	119	71.3	119	3	US-08-488-208A-25	Sequence 25, Appl
48	119	71.3	119	3	US-08-483-211A-25	Sequence 25, Appl
49	119	71.3	119	3	US-08-488-223A-25	Sequence 25, Appl
50	119	71.3	119	4	US-08-438-431A-25	Sequence 25, Appl
51	119	71.3	119	4	US-08-488-225A-25	Sequence 25, Appl
52	119	71.3	119	4	US-09-686-647A-25	Sequence 25, Appl
53	119	71.3	146	2	US-08-788-943A-3	Sequence 3, Appli
54	119	71.3	146	2	US-08-823-104-12	Sequence 12, Appl
55	119	71.3	146	3	US-08-674-774-3	Sequence 3, Appli
56	118	70.7	146	1	US-08-678-369-4	Sequence 4, Appli
57	118	70.7	146	2	US-08-788-943A-1	Sequence 1, Appli
58	118	70.7	146	2	US-08-788-943A-4	Sequence 4, Appli
59	118	70.7	146	2	US-08-823-104-5	Sequence 5, Appli
60	118	70.7	146	2	US-09-047-243-4	Sequence 4, Appli
61	118	70.7	146	2	US-08-804-668-1	Sequence 1, Appli
62	118	70.7	146	3	US-08-674-774-4	Sequence 4, Appli
63	118	70.7	166	2	US-08-347-563A-6	Sequence 6, Appli
64	118	70.7	166	3	US-08-292-345B-6	Sequence 6, Appli
65	118	70.7	166	3	US-08-485-942A-6	Sequence 6, Appli
66	118	70.7	166	3	US-08-488-214A-6	Sequence 6, Appli
67	118	70.7	166	3	US-08-488-208A-6	Sequence 6, Appli
68	118	70.7	166	3	US-08-483-211A-6	Sequence 6, Appli

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: April 8, 2005, 20:34:05 ; Search time 173 Seconds
(without alignments)
373.347 Million cell updates/sec

Title: US-09-668-558B-32
Perfect score: 167
Sequence: 1 MHWGTLGFLWLWPYLFYVQ.....SRLQGSLQDMLWQLDLSPGC 167

Scoring table: OLIGO
Gapop 60.0 , Gapext 60.0

Searched: 2105692 seqs, 386760381 residues

Word size : 0

Total number of hits satisfying chosen parameters: 2105692

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Listing first 1000 summaries

Database : A_Geneseq_16Dec04:*
1: geneseqp1980s:*
2: geneseqp1990s:*
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6: geneseqp2003as:*
7: geneseqp2003bs:*
8: geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query		DB	ID	Description
		Match	Length			
1	167	100.0	167	2	AAW03694	Aaw03694 Human obe
2	167	100.0	167	2	AAR99473	Aar99473 Human ob
3	167	100.0	167	2	AAR92720	Aar92720 Obesity p
4	167	100.0	167	2	AAW34060	Aaw34060 Human obe
5	167	100.0	167	2	AAW57442	Aaw57442 Human lep
6	167	100.0	167	3	AAW82110	Aay82110 Human obe
7	167	100.0	167	3	AAB28448	Aab28448 Human OB
8	167	100.0	167	3	AAW84190	Aay84190 Amino aci
9	167	100.0	167	3	AAW80259	Aay80259 Human obe

10	167	100.0	167	3	AAy87726	Aay87726	Murine OB
11	167	100.0	167	3	AAB28467	Aab28467	Human OB
12	167	100.0	167	4	AAB59914	Aab59914	Human lep
13	167	100.0	167	4	AAB72927	Aab72927	Human lep
14	167	100.0	167	4	AAE10338	Aae10338	Human lep
15	167	100.0	167	4	AAU02890	Aau02890	Human Ob
16	167	100.0	167	4	AAB70128	Aab70128	Human lep
17	167	100.0	167	5	ABG74164	Abg74164	Human obe
18	167	100.0	167	5	ABB84116	Abb84116	Human Ob
19	167	100.0	167	6	ABU64561	Abu64561	Human obe
20	167	100.0	167	7	ADE56246	Ade56246	Human Pro
21	167	100.0	167	7	ADF15260	Adf15260	Human alb
22	167	100.0	167	7	ADF15253	Adf15253	Human alb
23	167	100.0	167	7	ADF15257	Adf15257	Human alb
24	167	100.0	167	7	ADF15259	Adf15259	Human alb
25	167	100.0	167	7	ADH21374	Adh21374	Human lep
26	167	100.0	167	7	ADH21373	Adh21373	Human lep
27	167	100.0	167	7	ADH21372	Adh21372	Human lep
28	167	100.0	167	7	ADH21371	Adh21371	Human lep
29	167	100.0	167	8	ADH17068	Adh17068	Human lep
30	167	100.0	167	8	ADK19923	Adk19923	Human lep
31	167	100.0	167	8	ADO24730	Ado24730	Human lep
32	167	100.0	167	8	ADQ19663	Adq19663	Human sof
33	167	100.0	396	2	AAW10534	Aaw10534	Leptin 1-
34	167	100.0	396	2	AAW10535	Aaw10535	Leptin 1-
35	167	100.0	397	2	AAW22722	Aaw22722	Human obe
36	167	100.0	397	2	AAW24060	Aaw24060	Human obe
37	167	100.0	397	2	ADD29344	Add29344	Human obe
38	167	100.0	397	7	ADC08948	Adc08948	Human OB
39	167	100.0	397	7	ADC78787	Adc78787	Human PRO
40	167	100.0	399	2	AAW10536	Aaw10536	Leptin 1-
41	167	100.0	401	2	AAW10537	Aaw10537	Leptin 1-
42	167	100.0	752	7	ADF15039	Adf15039	Human alb
43	167	100.0	752	7	ADH21302	Adh21302	Human alb
44	155	92.8	167	4	AAU02996	Aau02996	Human Ob
45	154	92.2	167	4	AAU02995	Aau02995	Human Ob
46	150	89.8	167	4	AAU02994	Aau02994	Human Ob
47	148	88.6	167	4	AAU02993	Aau02993	Human Ob
48	147	88.0	167	2	AAW00518	Aaw00518	Human obe
49	147	88.0	167	2	AAW00519	Aaw00519	Human obe
50	146	87.4	146	2	AAW00013	Aaw00013	Acid stab
51	146	87.4	146	2	AAR99490	Aar99490	Chimeric
52	146	87.4	146	2	AAW00539	Aaw00539	Human mat
53	146	87.4	146	2	AAW30892	Aaw30892	Synthetic
54	146	87.4	146	2	AAW34482	Aaw34482	Human obe
55	146	87.4	146	2	AAW10151	Aaw10151	Properly
56	146	87.4	146	2	AAW22901	Aaw22901	Biologica
57	146	87.4	146	2	AAW30791	Aaw30791	Obesity p
58	146	87.4	146	2	AAW26194	Aaw26194	Obesity p
59	146	87.4	146	2	AAW34483	Aaw34483	Human obe
60	146	87.4	146	2	AAW32575	Aaw32575	Anti obes
61	146	87.4	146	2	AAW34489	Aaw34489	Obesity p
62	146	87.4	146	2	AAW69682	Aaw69682	Human obe
63	146	87.4	146	2	AAW53342	Aaw53342	Obesity p
64	146	87.4	146	2	AAy43311	Aay43311	Human lep
65	146	87.4	146	2	AAy06102	Aay06102	Human obe
66	146	87.4	146	3	AAy92712	Aay92712	Mature le

67	146	87.4	146	3	AAy82111	Aay82111	Mature hu
68	146	87.4	146	3	AAy80260	Aay80260	Human mat
69	146	87.4	146	3	AAy83768	Aay83768	Human OB
70	146	87.4	146	3	AAy97871	Aay97871	Mature wi
71	146	87.4	146	3	AAy95786	Aay95786	Mature re
72	146	87.4	146	3	AAy95531	Aay95531	Human mat
73	146	87.4	146	3	AAB14265	Aab14265	Mature hu
74	146	87.4	146	4	AAB70130	Aab70130	Mature hu
75	146	87.4	146	5	AAE23614	Aae23614	Human lep
76	146	87.4	146	5	ABG32264	Abg32264	Recombina
77	146	87.4	146	5	ABP63579	Abp63579	Human obe
78	146	87.4	146	5	ADG65529	Adg65529	Human lep
79	146	87.4	146	6	ABR57162	Abr57162	Recombina
80	146	87.4	146	7	ADC06694	Adc06694	Leptin ta
81	146	87.4	146	7	ADD26675	Add26675	Human adi
82	146	87.4	146	7	ADD71107	Add71107	Human lep
83	146	87.4	146	8	ADI80474	Adi80474	Mature hu
84	146	87.4	146	8	ADL88877	Adl88877	Human cyt
85	146	87.4	147	2	AAW34394	Aaw34394	Human Met
86	146	87.4	147	2	AAW27167	Aaw27167	Human rec
87	146	87.4	147	2	AAW53328	Aaw53328	Human obe
88	146	87.4	147	2	AAy43314	Aay43314	Human lep
89	146	87.4	147	3	AAy92261	Aay92261	Mature re
90	146	87.4	148	2	AAW07192	Aaw07192	Human ant
91	146	87.4	148	2	AAW28801	Aaw28801	Human mas
92	146	87.4	148	2	AAW71849	Aaw71849	Obesity p
93	146	87.4	166	2	AAW00535	Aaw00535	Human obe
94	146	87.4	167	2	AAW00516	Aaw00516	Human obe
95	146	87.4	167	2	AAW00520	Aaw00520	Human obe
96	146	87.4	167	2	AAW00521	Aaw00521	Human obe
97	146	87.4	167	2	AAW00517	Aaw00517	Human obe
98	146	87.4	374	2	AAW49076	Aaw49076	Recombina
99	146	87.4	374	2	AAW49075	Aaw49075	Recombina
100	146	87.4	374	2	AAW83963	Aaw83963	Recombina
101	146	87.4	379	2	AAW49073	Aaw49073	Recombina
102	146	87.4	379	2	AAW49074	Aaw49074	Recombina
103	146	87.4	379	2	AAW83962	Aaw83962	Recombina
104	146	87.4	755	7	ADF15046	Adf15046	Human alb
105	146	87.4	755	7	ADF15043	Adf15043	Human alb
106	146	87.4	755	7	ADF15045	Adf15045	Human alb
107	146	87.4	755	7	ADH21305	Adh21305	Human alb
108	146	87.4	755	7	ADH21303	Adh21303	Human alb
109	146	87.4	755	7	ADH21304	Adh21304	Human alb
110	141	84.4	146	8	ADL89348	Adl89348	Human mod
111	141	84.4	146	8	ADL89349	Adl89349	Human mod
112	141	84.4	158	4	AAU02997	Aau02997	Human Ob
113	140	83.8	146	8	ADL89347	Adl89347	Human mod
114	140	83.8	146	8	ADL89346	Adl89346	Human mod
115	138	82.6	138	2	AAW07434	Aaw07434	Large mon
116	138	82.6	167	4	AAU02895	Aau02895	Human Ob
117	137	82.0	146	2	AAW00010	Aaw00010	Acid stab
118	137	82.0	146	2	AAR99493	Aar99493	Chimeric
119	137	82.0	146	2	AAW30897	Aaw30897	Synthetic
120	137	82.0	146	2	AAW26196	Aaw26196	Obesity p
121	137	82.0	146	2	AAW18625	Aaw18625	Obesity p
122	137	82.0	146	2	AAW32577	Aaw32577	Anti obes
123	137	82.0	146	2	AAW34491	Aaw34491	Obesity p

979	7	4.2	7	4	AAB59935	Aab59935 Human lep
980	7	4.2	7	5	ABB84134	Abb84134 Murine C5
981	7	4.2	7	6	ABU64579	Abu64579 Obese (ob
982	7	4.2	7	8	ADO24731	Ado24731 Human lep
983	7	4.2	8	2	AAW00072	Aaw00072 N-termina
984	7	4.2	8	2	AAW00607	Aaw00607 Small pep
985	7	4.2	15	3	AAAY84184	Aay84184 Amino aci
986	7	4.2	15	3	AAAY84183	Aay84183 Amino aci
987	7	4.2	15	8	ADO24723	Ado24723 Mouse lep
988	7	4.2	15	8	ADO24724	Ado24724 Mouse lep
989	7	4.2	16	5	ABJ04476	Abj04476 BRASIL me
990	7	4.2	16	5	ABJ04475	Abj04475 Mouse lep
991	7	4.2	18	2	AAW00070	Aaw00070 N-termina
992	7	4.2	18	2	AAW01405	Aaw01405 Generic o
993	7	4.2	20	3	AAAY95798	Aay95798 Hybrid le
994	7	4.2	21	3	AAAY95797	Aay95797 Hybrid le
995	7	4.2	22	4	AAB59947	Aab59947 Murine le
996	7	4.2	63	6	ADA35195	Ada35195 Acinetoba
997	7	4.2	73	4	AAO13414	Aao13414 Human pol
998	7	4.2	102	7	ADH85627	Adh85627 Enterococ
999	7	4.2	127	3	AAG00027	Aag00027 Human sec
1000	7	4.2	132	4	AAU39229	Aau39229 Propionib

ALIGNMENTS

RESULT 1

AAW03694

ID AAW03694 standard; protein; 167 AA.

XX

AC AAW03694;

XX

DT 15-JUL-1997 (first entry)

XX

DE Human obese (ob) protein.

XX

KW Human; obese; ob; body; weight; modulation; defect; mutation; prevention;

KW interference; production; function; treatment; control; obesity; disease;

KW reduction; food intake; gain; mammal; type II; diabetes; mellitus;

KW hypertension; hyperlipidaemia; hyperlipidemia; identification; receptor.

XX

OS Homo sapiens.

XX

FH Key Location/Qualifiers

FT Peptide 1. .21

FT /label= sig_peptide

FT Peptide 22. .167

FT /label= mat_peptide

XX

PN EP741187-A2.

XX

PD 06-NOV-1996.

XX

PF 24-APR-1996; 96EP-00106408.

XX

PR 05-MAY-1995; 95US-00435777.

PR 07-JUN-1995; 95US-00484629.
 XX
 PA (HOFF) HOFFMANN LA ROCHE & CO AG F.
 XX
 PI Campfield A, Devos R, Guisez Y;
 XX
 DR WPI; 1996-487390/49.
 DR N-PSDB; AAT42168.
 XX
 PT New isolated human and murine obese proteins - and related DNA, used for
 PT the treatment, prevention and control of obesity and associated diseases.
 XX
 PS Claim 3; Page 28-29; 36pp; English.
 XX
 CC The present sequence is the human obese (ob) protein, a body weight
 CC modulator, which can be administered to patients suffering from ob gene
 CC defects or mutations which prevent or interfere with its production
 CC and/or function. The ob protein can be used to treat, prevent or control
 CC obesity and associated diseases by reducing food intake and weight gain
 CC in mammals. It can also be used to treat related conditions such as type
 CC II diabetes mellitus, hypertension and hyperlipidaemia, and to identify
 CC ob protein receptors. The human ob gene was isolated by screening a
 CC lambda phage cDNA library, made from human adipocyte tissue derived RNA,
 CC with a murine ob gene obtained using the methods of Zhang, Y. et al.,
 CC Nature 372, 425-432 (1994)
 XX
 SQ Sequence 167 AA;

Query Match 100.0%; Score 167; DB 2; Length 167;
 Best Local Similarity 100.0%; Pred. No. 6.2e-163;
 Matches 167; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MHWGTLGFLWLWPYLFYVQAVPIQKVQDDTKTLIKTIVTRINDISHTQSVSSKQKVTGL 60
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 Db 1 MHWGTLGFLWLWPYLFYVQAVPIQKVQDDTKTLIKTIVTRINDISHTQSVSSKQKVTGL 60
 Qy 61 DFIPGLHPILTLISKMDQTLAVYQQILTSMPSRNVIQISNDLENLRDLLHVLAFSKSCHLP 120
 |||
 Db 61 DFIPGLHPILTLISKMDQTLAVYQQILTSMPSRNVIQISNDLENLRDLLHVLAFSKSCHLP 120
 Qy 121 WASGLETLDLGGVLEASGYSTEVALSRLQGSLQDMLWQLDLSPGC 167
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 Db 121 WASGLETLDLGGVLEASGYSTEVALSRLQGSLQDMLWQLDLSPGC 167

RESULT 2

AAR99473

ID AAR99473 standard; protein; 167 AA.

XX

AC AAR99473;

XX

DT 22-OCT-1996 (first entry)

XX

DE Human ob protein.

XX

KW Obesity; ob gene; ob protein; appetite suppression factor.

XX

OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Peptide 1. .21
 FT /label= Sig_peptide
 FT Protein 22. .167
 FT /label= Mat_protein
 XX
 PN WO9622308-A2.
 XX
 PD 25-JUL-1996.
 XX
 PF 22-JAN-1996; 96WO-US001471.
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 PR 20-JAN-1995; 95US-00377068.
 PR 10-APR-1995; 95US-00419214.
 PR 07-JUN-1995; 95US-00486450.
 PR 07-JUN-1995; 95US-00486459.
 PR 07-JUN-1995; 95US-00487111.
 PR 04-OCT-1995; 95US-00540242.
 XX
 PA (ZYMO) ZYMOGENETICS INC.
 PA (UNIW) UNIV WASHINGTON.
 XX
 PI Weigle DS, Kuijper JL, Bukowski TR;
 XX
 DR WPI; 1996-354476/35.
 DR N-PSDB; AAT34164.
 XX
 PT Identifying factors that regulate appetite, e.g. for treatment of obesity
 PT - by administering a test sample to a mammal and determining decrease in
 PT food consumption.
 XX
 PS Claim 6; Page 76; 90pp; English.
 XX
 CC The human ob protein (appetite suppression factor) amino acid sequence
 CC (AAR99473) was deduced from a cDNA clone (AAT34164) derived from human
 CC adipose tissue. The mature ob protein, pref. modified with an N-terminal
 CC histidine tag, can be obtd. by expression in transformed host (esp.
 CC yeast) cells. It is used to regulate the appetite of an individual,
 CC thereby decreasing food consumption. Mouse ob proteins (see also AAR99472
 CC and AAR99474) were also identified
 XX
 SQ Sequence 167 AA;

Query Match 100.0%; Score 167; DB 2; Length 167;
 Best Local Similarity 100.0%; Pred. No. 6.2e-163;
 Matches 167; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

Qy      1 MHWGTLCGFLWLWPYLFYVQAVPIQKVQDDTKTLIKTIVTRINDISHTQSVSSKQKVTGL 60
        |||
Db      1 MHWGTLCGFLWLWPYLFYVQAVPIQKVQDDTKTLIKTIVTRINDISHTQSVSSKQKVTGL 60

Qy     61 DFIPGLHPILTL SKMDQTLAVYQQILTSMP SRNVIQISNDLENLRDLLHVLAFSKSCHLP 120
        |||
Db     61 DFIPGLHPILTL SKMDQTLAVYQQILTSMP SRNVIQISNDLENLRDLLHVLAFSKSCHLP 120
  
```


Qy 121 WASGLETLDLGGVLEASGYSTEVVALSRLQGS LQDMLWQLDLSPGC 167
 ||||||||||||||||||||||||||||||||||||||||
 Db 121 WASGLETLDLGGVLEASGYSTEVVALSRLQGS LQDMLWQLDLSPGC 167

RESULT 3

AAR92720

ID AAR92720 standard; protein; 167 AA.

XX

AC AAR92720;

XX

DT 12-SEP-1996 (first entry)

XX

DE Obesity protein.

XX

KW Obesity; mouse; OBP; leptin; hormone; body weight regulation; diabetes;
 KW food intake; energy expenditure; high blood pressure; cholesterol; human;
 KW gene therapy; antibody; cancer; Kobe beef; Foie gras; immunoassay.

XX

OS Homo sapiens.

XX

FH Key Location/Qualifiers

FT Peptide 1. .21

FT /note= "signal peptide"

FT Protein 22. .167

FT /note= "obesity protein"

XX

PN GB2292382-A.

XX

PD 21-FEB-1996.

XX

PF 17-AUG-1995; 95GB-00016947.

XX

PR 17-AUG-1994; 94US-00292345.

PR 30-NOV-1994; 94US-00347563.

PR 10-MAY-1995; 95US-00438431.

PR 07-JUN-1995; 95US-00483211.

XX

PA (UYRQ) UNIV ROCKEFELLER.

XX

PI Friedman JM, Zhang Y, Proenca R, Maffei M, Halaas JL, Gajiwala K;

PI Burley SK;

XX

DR WPI; 1996-099009/11.

DR N-PSDB; AAT16373.

XX

PT Obesity polypeptide(s) able to modulate body wt. - useful for e.g.
 PT reducing wt. in treatment of diabetes, high blood pressure and high
 PT cholesterol and for cosmetic reasons.

XX

PS Claim 2; p171-172; 304pp; English.

XX

CC This sequence represents the human obesity polypeptide (OBP). OBP (also
 CC known as leptin) is a hormone involved in the regulation of body weight.
 CC This sequence has effects on both food intake and energy expenditure. OBP
 CC and its analogues are useful for modifying body weight (optionally
 CC combined with known medicaments), for treating diabetes, high blood

CC pressure or high cholesterol. The DNA encoding this sequence (and
 CC sequences complimentary to it) can be used in gene therapy for modifying
 CC body weight. This protein can be used for reducing weight for health or
 CC cosmetic reasons in obese humans, or to produce leaner food animals.
 CC Antagonists of OBP (including antibodies) are useful for increasing body
 CC weight, e.g. for treating weight loss associated with cancer, or for
 CC cosmetic reasons in humans, or for production of Kobe beef or Foie gras
 CC in domestic animals. OBP antibodies (Ab) can also be used in diagnostic
 CC immunoassays for the presence of OBP. The formation of Ab-OBP complexes
 CC enables in vitro evaluation of levels of OBP in a sample, especially to
 CC detect diseases associated with elevated or decreased levels, and to
 CC monitor treatment of these diseases

XX

SQ Sequence 167 AA;

Query Match 100.0%; Score 167; DB 2; Length 167;
 Best Local Similarity 100.0%; Pred. No. 6.2e-163;
 Matches 167; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MHWGTLGFLWLWPYLFYVQAVPIQKVQDDTKTLIKTIVTRINDISHTQSVSSKQKVTGL 60
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 1 MHWGTLGFLWLWPYLFYVQAVPIQKVQDDTKTLIKTIVTRINDISHTQSVSSKQKVTGL 60
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Qy 61 DFIPGLHPILTLISKMDQTLAVYQQILTSMPSRNVIQISNDLENLRDLLHVLAFSKSKCHLP 120
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 61 DFIPGLHPILTLISKMDQTLAVYQQILTSMPSRNVIQISNDLENLRDLLHVLAFSKSKCHLP 120
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Qy 121 WASGLETLDLGGVLEASGYSTEVVALSRLQGSLQDMLWQLDLSPGC 167
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 121 WASGLETLDLGGVLEASGYSTEVVALSRLQGSLQDMLWQLDLSPGC 167

RESULT 4

AAW34060

ID AAW34060 standard; protein; 167 AA.

XX

AC AAW34060;

XX

DT 24-APR-1998 (first entry)

XX

DE Human obese (ob) protein.

XX

KW Obese protein; ob protein; osteogenic cell; bone-forming activity;
 KW migration; bone-forming cell; marrow mesenchymal cell; bone repair;
 KW bone healing; bone loss.

XX

OS Homo sapiens.

XX

FH Key Location/Qualifiers
 FT Peptide 1. .21
 FT /note= "signal peptide"

XX

PN WO9739767-A1.

XX

PD 30-OCT-1997.

XX

PF 18-APR-1997; 97WO-US006892.

XX
 PR 19-APR-1996; 96US-0015647P.
 XX
 PA (ZYMO) ZYMOGENETICS INC.
 PA (UNIW) UNIV WASHINGTON.
 XX
 PI Durnam DM, Kuijper JL, Weigle DS, Liu CC;
 XX
 DR WPI; 1997-535577/49.
 DR N-PSDB; AAT93021.
 XX
 PT Use of obese protein for inducing bone formation - particularly for
 PT treating osteoporosis, repairing fractures, dental defects or
 PT resectioning due to oncogenesis.
 XX
 PS Disclosure; Page 32; 42pp; English.
 XX
 CC The present sequence represents a human obese (ob) protein. DNA sequence
 CC was isolated from an adipose tissue cDNA library using a probe derived
 CC from the mouse obese gene. ob proteins can produce a dramatic increase in
 CC osteogenic cells or their bone-forming activity. They can enhance
 CC recruitment or migration of bone-forming cells to the proper bone-forming
 CC tissues and tissue sites. The ob protein was used in the method of the
 CC invention, which involves the stimulation of a cell population containing
 CC marrow mesenchymal cells. The method comprises exposing the cell
 CC population to an ob protein for expansion of osteogenic cells, a
 CC biological fluid obtained from an ob protein-treated mammal, or a culture
 CC medium that has been conditioned by growth of endocrine or CNS cells or
 CC tissue exposed to ob protein. The method can be used in a mammal for
 CC promoting bone repair or bone healing, stimulating bone ingrowth into a
 CC prosthetic device or dental implant that has been inserted into a mammal,
 CC for treating bone loss, for increasing bone length, for stimulating
 CC active bone growth, or for inducing bone formation
 XX
 SQ Sequence 167 AA;

Query Match 100.0%; Score 167; DB 2; Length 167;
 Best Local Similarity 100.0%; Pred. No. 6.2e-163;
 Matches 167; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MHWGTLGFLWLWPYLFYVQAVPIQKVQDDTKTLIKTIVTRINDISHTQSVSSKQKV TGL 60
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 1 MHWGTLGFLWLWPYLFYVQAVPIQKVQDDTKTLIKTIVTRINDISHTQSVSSKQKV TGL 60
 Qy 61 DFIPGLHPILTL SKMDQTLAVYQQILTSMP SRNVIQISNDLENLRDLLHVLA FSKSCHLP 120
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 61 DFIPGLHPILTL SKMDQTLAVYQQILTSMP SRNVIQISNDLENLRDLLHVLA FSKSCHLP 120
 Qy 121 WASGLETLD SLGGVLEASGYSTE VVALSRLQGS LQDMLWQLDLSPGC 167
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 121 WASGLETLD SLGGVLEASGYSTE VVALSRLQGS LQDMLWQLDLSPGC 167

RESULT 5
 AAW57442
 ID AAW57442 standard; peptide; 167 AA.
 XX

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AC      AAW57442;
XX
XX
DT      10-AUG-1998   (first entry)
XX
DE      Human leptin sequence.
XX
KW      Leptin; murine; antagonist; treatment; type II diabetes; insulin; human.
XX
OS      Homo sapiens.
XX
FH      Key           Location/Qualifiers
FT      Disulfide-bond 7. .167
FT                        /note= "disulphide bridge"
XX
PN      WO9812224-A1.
XX
PD      26-MAR-1998.
XX
PF      15-SEP-1997;   97WO-EP005035.
XX
PR      20-SEP-1996;   96DE-01038487.
XX
PA      (FARH ) HOECHST AG.
XX
PI      Ertl J,   Preibisch G,   Mueller G;
XX
DR      WPI; 1998-217209/19.
XX
PT      Use of leptin antagonists - for restoring or amplifying the physiological
PT      effect of insulin in the treatment of Type II diabetes.
XX
PS      Disclosure; Page 19; 30pp; English.
XX
CC      This is a human leptin protein sequence which is highly homologous to the
CC      murine leptin sequence. The carboxyl-terminal fragment of the murine
CC      leptin can act as a leptin antagonist. This can be used in a
CC      pharmaceutical composition which comprises the murine leptin fragment
CC      which is therapeutically beneficial for the treatment of Type II
CC      diabetes. The leptin antagonists include peptides derived from leptin
CC      fragments and may be obtained by chemically or enzymatically cleaving
CC      intact leptin or by recombinant expression using microorganisms. This
CC      fragment can be prepared by digestion of leptin with lysyl endopeptidase.
CC      The leptin antagonists can restore or amplify the physiological effect of
CC      insulin by inhibiting leptin-induced insulin resistance
XX
SQ      Sequence 167 AA;

```

```

Qy      1  MHWGTL CGFLWLWPYLFYVQAVPIQKVQDDTKTLIKTIVTRINDISHTQSVSSKQKVTGL  60
      |||
Db      1  MHWGTL CGFLWLWPYLFYVQAVPIQKVQDDTKTLIKTIVTRINDISHTQSVSSKQKVTGL  60
      |||
Qy     61  DFIFGLHPILTL SKMDQTLAVYQQILTSMP SRNVIQISNDLENLRDLLHVLA FSKSCHLP 120
      |||

```

Db 61 DFIPGLHPILTL SKMDQTLAVYQQILTSMP SRNVIQISNDLENLRDLLHVLA FSKSCHLP 120

Qy 121 WASGLETLD SLGGVLEASGYSTE VVALSRLQGS LQDMLWQLDLSPGC 167
 |||

Db 121 WASGLETLD SLGGVLEASGYSTE VVALSRLQGS LQDMLWQLDLSPGC 167

RESULT 6

AA Y82110

ID AAY82110 standard; protein; 167 AA.

XX

AC AAY82110;

XX

DT 05-JUN-2000 (first entry)

XX

DE Human obese protein SEQ ID NO:5.

XX

KW Ob gene; ob protein; obesity; body weight; polyethylene; obese protein;
 KW polypropylene; protein conjugate; anorectic.

XX

OS Homo sapiens.

XX

PN US6025324-A.

XX

PD 15-FEB-2000.

XX

PF 15-MAY-1996; 96US-00648262.

XX

PR 15-MAY-1996; 96US-00648262.

XX

PA (HOFF) HOFFMANN LA ROCHE INC.

XX

PI Bailon PS, Devos R, Campfield A, Guisez Y;

XX

DR WPI; 2000-222636/19.

DR N-PSDB; AAZ95530.

XX

PT Polyethylene and polypropylene obese protein conjugates are useful for
 PT the prevention, treatment and control of obesity and associated diseases
 PT and conditions.

XX

PS Disclosure; Col 35-36; 26pp; English.

XX

CC The present invention describes a composition comprising one or more
 CC polyethylene and polypropylene human obese protein conjugates (I). The
 CC composition has anorectic activity. The conjugates are used for the
 CC treatment, prevention and control of obesity and associated conditions in
 CC humans and animals. The present sequence represents the human obese
 CC protein

XX

SQ Sequence 167 AA;

Query Match 100.0%; Score 167; DB 3; Length 167;
 Best Local Similarity 100.0%; Pred. No. 6.2e-163;
 Matches 167; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MHWGTL CGFLWLWPYLFYVQAVPIQKVQDDTKTLIKTIVTRINDISHTQSVSSKQKV TGL 60

```

Db      |||||||
1 MHWGTLGFLWLPYLFYVQAVPIQKVQDDTKTLIKTIVTRINDISHTQSVSSKQKVTGL 60

Qy      61 DFIPGLHPILTLISKMDQTLAVYQQILTSMPSRNVIQISNDLENLRDLLHVLAFSKSKCHLP 120
        |||||||

Db      61 DFIPGLHPILTLISKMDQTLAVYQQILTSMPSRNVIQISNDLENLRDLLHVLAFSKSKCHLP 120

Qy      121 WASGLETLDLGGVLEASGYSTEVVALSRLQGSQDMLWQLDLSPGC 167
        |||||||

Db      121 WASGLETLDLGGVLEASGYSTEVVALSRLQGSQDMLWQLDLSPGC 167

```

RESULT 7

AAB28448

ID AAB28448 standard; protein; 167 AA.

XX

AC AAB28448;

XX

DT 01-FEB-2001 (first entry)

XX

DE Human OB polypeptide.

XX

KW Human; mouse; OB gene; obesity; adiposity; body weight.

XX

OS Homo sapiens.

XX

PN US6124448-A.

XX

PD 26-SEP-2000.

XX

PF 07-JUN-1995; 95US-00488208.

XX

PR 17-AUG-1994; 94US-00292345.

PR 30-NOV-1994; 94US-00347563.

PR 10-MAY-1995; 95US-00438431.

XX

PA (UYRQ) UNIV ROCKEFELLER.

XX

PI Maffei M, Proenca R, Zhang Y, Friedman JM;

XX

DR WPI; 2000-601556/57.

DR N-PSDB; AAC62566.

XX

PT Nucleic acid primers and probes useful for detecting mutations in

PT mammalian OB gene associated with regulation of body weight and

PT adiposity.

XX

PS Example; Fig 3; 153pp; English.

XX

CC The present sequence is encoded by a nucleotide sequence used in an
 CC invention relating to the control of body weight of animals including
 CC humans. Nucleic acids of at least 10 nucleotides which are hybridisable
 CC to a non-coding region of an OB nucleic acid have been created. The OB
 CC gene plays a critical role in the regulation of body weight and
 CC adiposity. The nucleic acids may be used as probes or as primers for PCR.
 CC They are useful for evaluating the presence of mutations in the human OB
 CC gene or for evaluating the level of expression of OB mRNA. Defects